

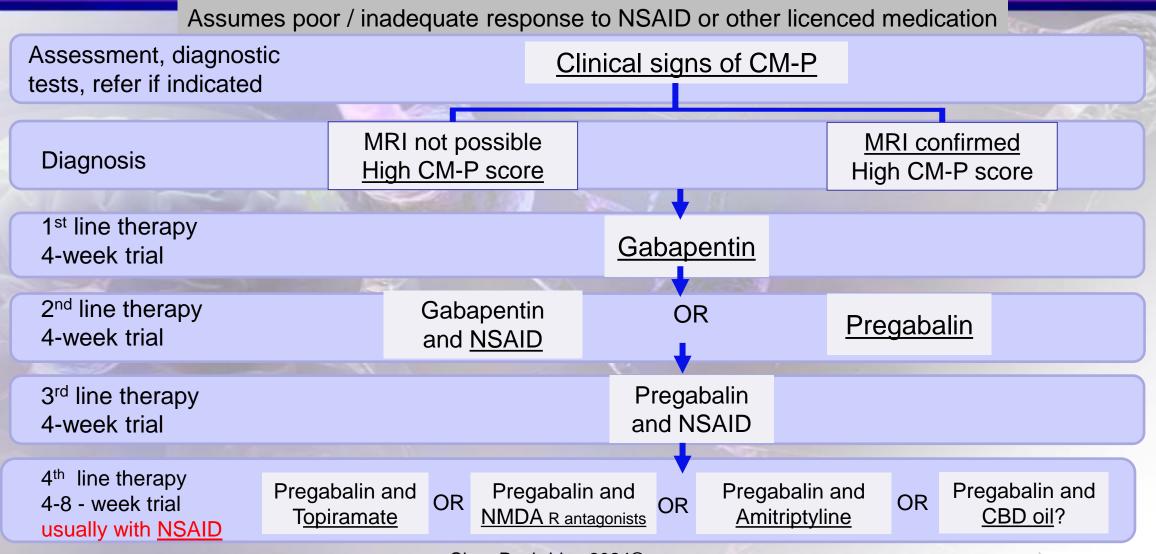
#### How to use this document

- The Canine Chiari and syringomyelia treatment algorithm is now supported by many videos (some listed at the end of the document)
- You can access the videos by clicking on underscored words → Click!
- The Canine Chiari and syringomyelia treatment algorithm is also supported by Chiari-Check.
   A diagnostic tool which generates a Chiari-pain and SM-score to help determine if Canine Chiari or syringomyelia is likely before an MRI scan (or if MRI not possible) and ultimately to monitor clinical signs. → Chiari Check
- Chiari-Check is still under development developed and will improve in accuracy in time
- The Canine Chiari and syringomyelia treatment algorithm is intended for veterinary surgeons and drugs should only be prescribed under the care of a veterinary surgeon
- Please refer to your national guidelines gabapentinoid drugs and CBD oil are controlled in many countries and all the drugs indicated in the algorithm are being used off label and care givers should be advised accordingly

#### Contents

- Treatment algorithm for Chiari Pain
- Treatment algorithm for Phantom Scratching Take me there
- Treatment algorithm for Weakness Take me there
- When is Surgery indicated? Take me there
- When is trial of CSF reducing drugs indicated? Take me there
- Cervicothoracic torticollis / scoliosis Take me there
- Top up therapy / bad Chiari pain days Take me there
- Supporting videos Take me there

# Medical Treatment algorithm 2024 — Chiari-Pain

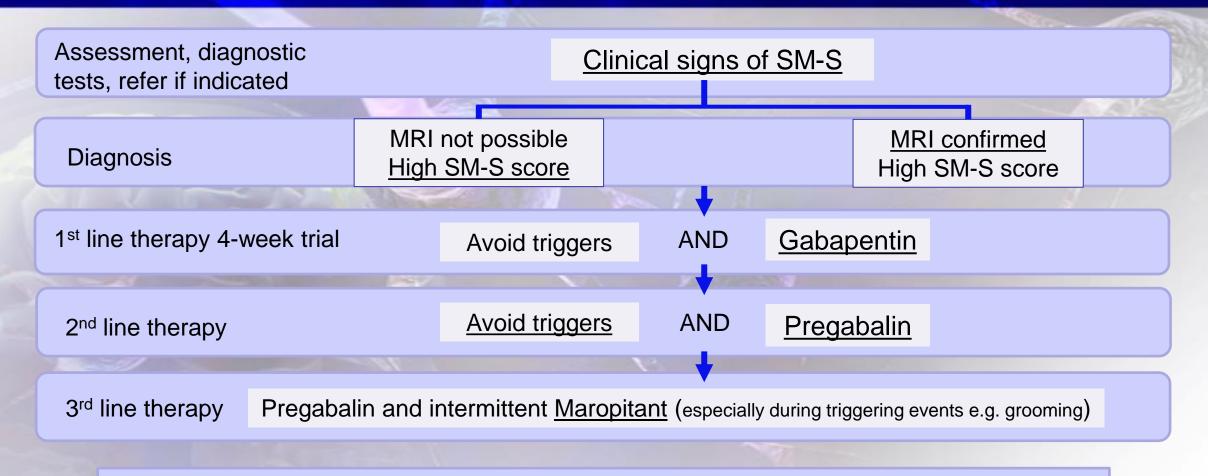


Clare Rusbridge 2024©

Top up therapy / bad pain days

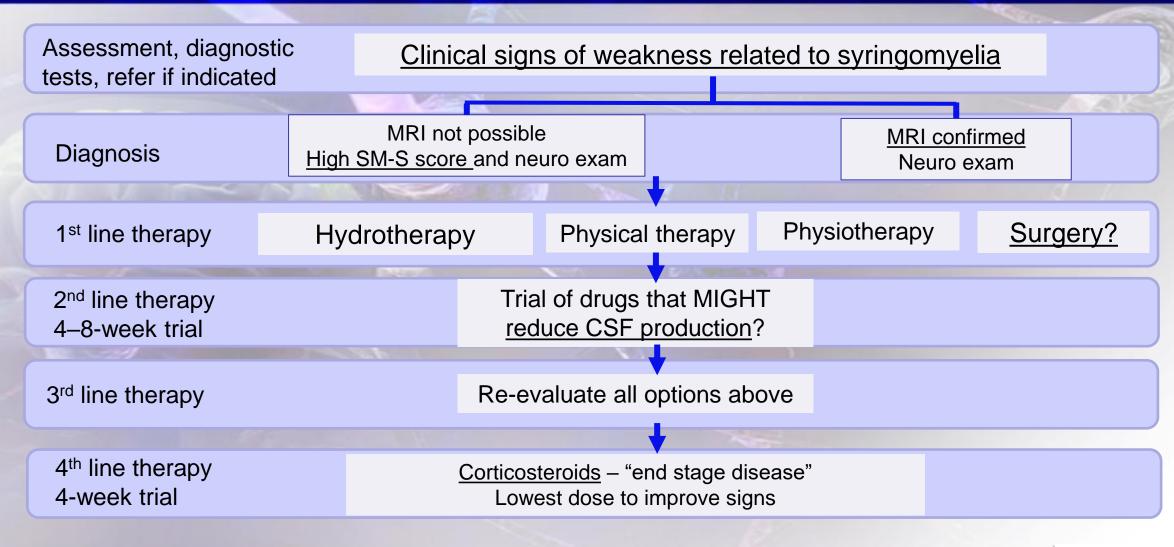
- First line
  - Add a <u>NSAID</u> (if not already receiving)
- Second line (not cats)
  - Add <u>paracetamol</u> (acetaminophen)
    - 10-20mg/kg up to every 8 hours
    - Long term not advised if giving more than 5 days reduce dose e.g.
       10mg/kg every 12 hours
- Third line
  - Ketamine (see supporting video)
    - Subcutaneous injection (one off or monthly)
    - Intravenous infusion (one off or monthly)

### Treatment algorithm 2024 – Phantom Scratching (SM-S)



In addition, optimised management Chiari-Pain

### Treatment algorithm 2024 - Syringomyelia weakness



# When is surgery indicated?

- CM Pain unresolved with medical management
- MRI suggests progressive disease likely
  - and where surgical management has fair to good collapse the syrinx).
- Weakness (forelimb and spinal)
  - and where surgical solution that has a fair to good prognosis to improve or stabilise situation

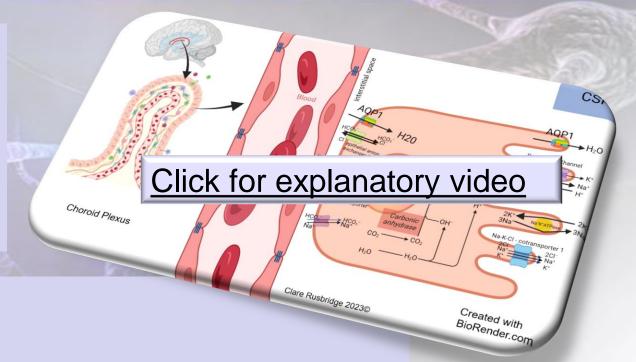
Supporting Video

#### Trial of drugs that MIGHT affect CSF production indicated?

- Hydrocephalus
  - Surgery not option or failed
- Poorly controlled CM pain
- Weakness
  - Surgery not option or failed

#### Based on available evidence

- First Line <u>Topiramate</u>
  - May be limited by sedation in neurologically compromised animal
- Second Line <u>Omeprazole</u>
  - High Dose?
  - Preferred option if regurgitation also issue



## Cervicothoracic torticollis / scoliosis



- Syrinx in C1-C3 spinal cord segments.
- Information from general proprioceptive afferents (neuromuscular spindles) disrupted.
- Results in abnormal function of epaxial muscles maintaining normal orientation of the head and neck.
- Often "improves" over years despite lack of improvement in SM due to central vestibular compensation.

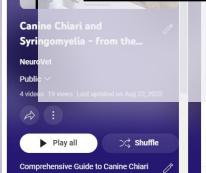


# Supporting videos (click to access)



#### Canine Chiari and Syringomyelia Playlist

- Canine Chiari Malformation
- <u>Syringomyelia the filling mechanism</u>
- Clinical Signs of Canine Chiari and **Syringomyelia**
- MRI interpretation of Canine Chiari and Syringomyelia
- Drugs that modulate CSF production
- Surgical interventions for Canine Chiari and Syringomyelia
- Maropitant for Phantom Scratching
- Medical management and treatment algorithm

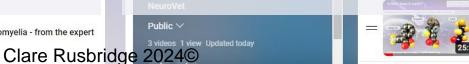




MRI interpretation of Canine Chiari and syringomyelia - from the expert

Neuropathic Pain Playlist

- Neurobiology of pain and neuropathic pain
- Gabapentin
- Pregabalin
- Palmitoylethanolamide (PEA)
- Cannabinol (CBD oil)
- Emotional Health, exercise, physiotherapy, acupuncture and sleep
- NSAIDs, Paracetamol and corticosteroids
- NMDA receptor antagonists (ketamine, amantadine, memantine) Neurobiology of Pain and Neuropathic pain - from the e
- **Topiramate**
- Amitriptyline



Gabapentin - 5 things you should know (in dogs and cat

Pregabalin - 5 things you should know about prescribing